

## **Make Learning Sticky**

**Glenn Wagner-** What I do with the students, though, is I share the research with them a little bit because I don't want them to believe me, so I tell them a little bit about, you know, why concept mapping works the way that it does. I tell them why peer instruction works the way that it does. And I, sometimes I show them a little bit of data and they say, where do you wanna be? Do you wanna be up here in your learning or do you wanna be here? Because if you wanna be up here, then we need to do these things, we need to have these productive talks. We need to think, pair and share, we need to ask questions compared to down here. And, of course, every student wants to be up here all the time, and so that's the hook. And so once they understand why we're doing these, you know, flashcard questions, why we're doing this voiceover video, why we're formulating questions and working in knowledge form, then that's when they understand. They say, okay, I know what Wagner's getting at. I mean, I also show them this pie graph that shows how, what makes learning sticky. The point is that they see that if they are practicing by doing, if they're interacting with each other, if they're teaching others, that the retention rate is so much higher compared to say, the teacher at the front of the classroom who might be lecturing or showing a video or doing a demonstration. Well, I tell you what, you know, you've got it, I think you've got the inclination of an idea. I think, what I think you should do is get the Play-Doh out, and the battery and the lights and start tinkering with it a little bit. I like what you're trying to do, but I think you need to tinker a little bit about how that's going to look because it looks like you're trying to figure out on paper but might be better to have a tactile-

**Female speaker 1-** I find that it's a lot more interesting than a normal classroom because it's normally just, oh, what'd you get on the test, oh, okay, that's your grade, there you go. But, now it's more, how much did you learn in this class, how are you learning it, how much are you wanting to learn in this class. So, when Mr. Wagner first came to the school, oh, things were kind of weird like how we were starting to learn. A little different than normal teachers, but about halfway through the semester, we started learning, like, oh, I really like how he's teaching this class and how we're learning things right now.

**Male speaker 1-** Well, like on the first day it was just sort of introductory, and then as the semester progressed we talked more and more, and then he gave us like more activities to do, and then that sort of got us all talking together.

**Female speaker 2-** It's kind of helping me learn from other points of views, and I have to learn other people's opinions because I know I'm not always gonna be right.

**Glenn Wagner-** Now, look at me. Your first shot in this might not be perfect, so in other words, if it's not working exactly as planned, you've gotten pretty far along. Now, we'll see what happens if you can get to the actual final product, but don't be surprised if you're gonna run into a few roadblocks. If you do, have a stop, have a little bit of a chat. Ask yourself what we're doing right, what we wanna perhaps improve upon, what we're doing wrong, perhaps, and see if you can get it to that spot where you are very, very happy with it, okay. You set the conditions in your classroom that, you know, having these formative assessments are incredibly important for learning because and you explain to them. Turning and chatting with each other in productive ways is very important for assessment of learning because, and if you convince them of that, then they take that on, I think, in a much more stronger way if they understand why we're doing those things. So, I want them to know how their brain works. I want them to know how to make knowledge sticky, and those are the things that I love bringing into to kids because they buy into it right away. And once I've got that, then it's wide open. Then, we can do all sorts of things, and say, hey, you remember that pie graph? Yeah, that's where we're heading, we're heading right this region right here. You know, so there's no pushback, never.

**Female speaker 3-** I can learn a lot better, now that I can comprehend different opinions and express different opinions and really think about things more. I found that I try to explain things more to other people because before I couldn't really explain it, I just knew it. But, now when people ask me, I can explain it better and try to get them to understand what I think of something more.

**Male speaker 2-** When we were doing climate change, I never really learned a lot about climate change. It wasn't something that really interested me in years before, and then we did it this year and we did it in groups together and just hearing all the other people's ideas and learning about what climate change really was, because I had really no idea what it was all about, and just it kind of like opened my eyes to what the climate change was and I learned so much more than I think I would've just in any other class.

**Male speaker 3-** I feel like I'm a lot more inquisitive. I ask a whole bunch more questions than I normally would, now, because of this class, which has kind of like changed how I view learning. I'm more social, and I like to be in groups more, and I'm more open with my ideas and my opinions and just talking to people in general.

**Female speaker 4** - I think it helps in the sense of like team building and dealing in groups, because like often I find in other classes it's very much see what's on the board, write it down, memorize it. But, here we kind of teach ourselves and teach each other by doing different activities.

**Glenn Wagner**- I think, ultimately, I want them to feel ultimately safe in being able to have these conversations in class and be wrong. And I know that's something that teachers often say, that, you know, it's okay, you can come to class and it's okay to make mistakes and ask questions and so forth. It's okay, no problem, but is that true? Like, is that really true? Is your classroom set up in such a way that you can chat about things, concepts and ideas and be wrong, but not be held against you. It's kind of like going for a driving instruction, right. You can do your driving lessons, and you can make the little mistakes within reason, of course, in driving. But, you can take these driving lessons and you can make these small mistakes, but you fix them as you go along and it doesn't count. It's all this formative stuff, but it does count at the end. So, it's what you do between there and at the end that really, really matters. And I often tell my students of my struggles as a student growing up and it wasn't a disaster, but it wasn't great, so I get it. I get what it means to be in a really crummy classroom, and I also get what it means to be in a really good classroom where it was a lot of fun and we had all this productive talk and, you know, conversations and ideas. I mean, it's beautiful. I mean, those are the ones that I remember years and years later. So, I always try to bring that back into play to say, okay, I remember what it was like. Okay, what do kids really need. If I'm a kid, what would I want, and so I try to put myself in their shoes, ultimately. And I think that works a lot, and I think the kids pick up on it and we have a good time.